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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/342,971	06/29/1999	TONY F. RODRIGUEZ	4830-53055/W	7370

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EXAMINER
LASTRA, DANIEL

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/342,971	Applicant(s) RODRIGUEZ ET AL.	
	Examiner DANIEL LASTRA	Art Unit 3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) #13,17
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claims 1-4 and 6-23 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 6-10, and 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (U.S. 6,438,251) in view of Rathus et al (U.S. 5,932,863).

As per claim 1, Yamaguchi teaches:

A promotional method comprising:

steganographically encoding an article of printed promotional material to hide plural-bit data therein, the steganographic encoding substantially spanning the article rather than being localized in one excerpt thereof, and spanning a portion of the article having a substantially non-uniform appearance (see column 1, lines 60-67 – column 2, lines 1-37; column 12, lines 30-67);

acquiring visible light scan data from the printed promotional material and processing same to extract the plural-bit data therefrom (see column 12, lines 30-67; column 14, lines 27-67); and

Yamaguchi fails to teach, using at least a part of the extracted plural-bit data to direct an Internet web browser to a web site that provides consumer information related to a product or service promoted by the printed promotional material. However, Rathus teaches a system that allows users to access electronic media via a printed matter or to

access electronic media relating to, or expanding upon, material presented in the printed matter (see column 2, lines 51-67 – column 3, lines 1-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would embed in a state of invisibility data related to a product or service promoted by the printed promotional material, as taught by Rathus. Yamaguchi's optical scanner would read the invisible data and would direct the user to a web site promoted by the printed material. This feature would make it easier to direct users to the printed advertisement web site so they can obtain more information about products and promotions.

As per claim 3, Yamaguchi teaches:

A promotional method comprising:

presenting a steganographically-encoded object within the field of view of a visible light optical sensor device, the object being selected from the list consisting of a retail product, or packaging for a retail product, the steganographic encoding having a strength that varies across the object in accordance with local characteristics thereof, so as to aid concealment of the encoding (see column 1, lines 60-67 – column 2, lines 1-37; column 12, lines 30-67). Yamaguchi does not expressly teach that the data would be steganographically encoded in a retail product. However, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that if Yamaguchi system steganographically encode data in printed matter such as paper (see column 12, lines 30-67), it would also steganographically encode data in a retail

product. This feature would not patentably distinguish the claimed invention from the prior art.

Yamaguchi teaches:

acquiring optical data corresponding to the object (see column 12, lines 30-67);

decoding plural-bit digital data from the optical data (see column 12, lines 30-67);

Yamaguchi fails to teach, submitting at least some of said decoded data to a remote computer and determining at the remote computer whether a prize should be awarded in response to submission of said decoded data. However, Rathus teaches a system that allows user to access electronic media via a printed matter or to access electronic media relating to, or expanding upon, material presented in the printed matter and thereby cause a promotional program to appear in the user's terminal (see column 2, lines 51-67 – column 3, lines 1-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would embed in a state of invisibility data related to promotions or prizes promoted by the printed promotional material, as taught by Rathus. Yamaguchi's optical scanner would read the invisible data and would direct the user to a web site promoted by the printed material. This feature would make it easier to direct users to the printed advertisement web site so they can obtain more information about products and promotions.

As per claim 4, Yamaguchi teaches:

A method of travel promotion, comprising:

steganographically encoding a travel photograph to hide plural-bit data therein, the steganographic encoding having a strength that varies across the photograph in accordance with local characteristics thereof, so as to aid concealment of the encoding (see column 3, lines 40-67 – column 4, lines 1-40) ;

acquiring visible light scan data from the travel photograph and processing same to extract the plural-bit data therefrom (see column 12, lines 30-67) ; and

Yamaguchi fails to teach, using at least part of the extracted plural-bit data to direct an Internet web browser to a web site that provides travel information useful to a consumer who wishes to visit the location depicted in the photograph. However, Rathus teaches a system that allows user to access electronic media via a printed matter or to access electronic media relating to, or expanding upon, material presented in the printed matter (see column 2, lines 51-67 – column 3, lines 1-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would embed in a state of invisibility data related to a product or service promoted by the printed promotional material, as taught by Rathus. Yamaguchi's optical scanner would read the invisible data and would direct the user to a web site promoted by the printed material. This feature would make it easier to direct users to the printed advertisement web site so they can obtain more information about products or promotions.

As per claim 6, Yamaguchi teaches:

A promotional method comprising:

steganographically encoding an article of printed promotional material to hide plural-bit data therein, the steganographic encoding having a strength that varies across the article in accordance with local characteristics thereof, so as to aid concealment of the encoding (see column 1, lines 60-67 – column 2, lines 1-37; column 12, lines 30-67);

acquiring visible light scan data from the printed promotional material and processing same to extract the plural-bit data therefrom (see column 12, lines 30-67); and

Yamaguchi fails to teach, using at least a part of the extracted plural-bit data to direct an Internet web browser to a web site that provides consumer information related to a product or service promoted by the printed promotional material. However, Rathus teaches a system that allows user to access electronic media via a printed matter or to access electronic media relating to, or expanding upon, material presented in the printed matter (see column 2, lines 51-67 – column 3, lines 1-30). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would embed in a state of invisibility data related to products or services promoted by the printed promotional material, as taught by Rathus. Yamaguchi's optical scanner would read the invisible data and would direct the user to a web site promoted by the printed material. This feature would make it easier to direct users to the printed advertisement web site so they can obtain more information about products and promotions.

As per claim 7, Yamaguchi teaches:

The method of claim 1 wherein the steganographic encoding has a strength that varies across the article in accordance with local characteristics thereof, so as to aid concealment of the encoding (see column 12, lines 30-67 – column 13).

As per claim 8, Yamaguchi does not expressly teach, the method of claim 1 wherein the processing includes discerning an apparent rotation of the scan data from an original orientation of the encoding, and compensating therefor. However, Yamagushi teaches the use of an alignment mark to compensate and fix misalignment in reading the embedded data printed on paper through the use of an optical reader (see columns 10-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent rotation of the scan data using an alignment mark and therefore be able to decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 9, Yamaguchi does not expressly teach, the method of claim 8 wherein the processing includes discerning an apparent scaling of the scan data from an original scale of the encoding, and compensating therefor. However, Yamaguchi teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would compensate for an apparent scaling of the scan data to read the different shades in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 10, Yamaguchi does not expressly teach, the method of claim 1 wherein the processing includes discerning an apparent scaling of the scan data from an original scale of the encoding, and compensating therefor. However, Yamaguchi teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would compensate for an apparent scaling of the scan data to read the different shades in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 12, Yagamuchi teaches:

The method of claim 3 wherein the steganographic encoding substantially spans the object rather than being localized in one excerpt thereof (see column 1, lines 60-67 – columns 2, lines 1-37; column 12, lines 30-67).

As per claim 13, Yagamuchi teaches:

The method of claim 12 wherein the steganographic encoding spans a portion of the object having a substantially non-uniform appearance (see column 1, lines 60-67 – columns 2, lines 1-37; column 12, lines 30-67).

As per claim 14, Yagamuchi teaches:

The method of claim 3 wherein the steganographic encoding spans a portion of the object having a substantially non-uniform appearance (see column 1, lines 60-67 – column 2, lines 1-37; column 12, lines 30-67).

As per claim 15, Yagamuchi does not expressly teach, the method of claim 3 wherein the decoding includes discerning an apparent rotation of the optical data from an original orientation of the encoding, and compensating therefor. However, Yamagushi teaches the use of an alignment mark to compensate and fix misalignment in reading the embedded data printed on paper through the use of a optical reader (see columns 10-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent rotation of the scan data using an alignment mark and therefore be able to decode the embedded data. This feature would help in reading and obtaining the invisible data from the image more precisely.

As per claim 16, Yamaguchi does not expressly teach, the method of claim 15 wherein the decoding includes discerning an apparent scaling of the optical data from an original scale of the encoding, and compensating therefor. However, Yamagushi teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent scaling of the scan data to read the different shades in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 17, Yagamuchi does not expressly teach, the method of claim 3 wherein the decoding includes discerning an apparent scaling of the optical data from an original scale of the encoding, and compensating therefor. However, Yamagushi

teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent scaling of the scan data to read the different shades in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 18, Yamaguchi teaches:

The method of claim 4 wherein the steganographic encoding substantially spans the photograph rather than being localized in one excerpt thereof (see column 1, lines 60-67 – column 2, lines 3-37; column 3, lines 40-66).

As per claim 19, Yagamuchi teaches:

The method of claim 18 wherein the photograph corresponds to a set of pixels, and the steganographic encoding spans a portion of pixels having substantially non-uniform values (see column 1, lines 40-67; column 9).

As per claim 20, Yagamuchi teaches:

The method of claim 4 wherein the photograph corresponds to a set of pixels, and the steganographic encoding spans a portion of pixels having substantially non-uniform values (see column 1, lines 40-67; column 9).

As per claim 21, Yagamuchi does not expressly teach, the method of claim 4 wherein the processing includes discerning an apparent rotation of the scan data from an original orientation of the encoding, and compensating therefor. However, Yamagushi teaches the use of an alignment mark to compensate and fix misalignment

in reading the embedded data printed on paper through the use of a optical reader (see columns 10-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent rotation of the scan data using an alignment mark and therefore be able to decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 22, Yamaguchi does not expressly teach, the method of claim 21 wherein the processing includes discerning an apparent scaling of the scan data from an original scale of the encoding, and compensating therefor. However, Yamaguchi teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamagushi would compensate for an apparent scaling of the scan data to read the different shades in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

As per claim 23, Yamaguchi does not expressly teach, the method of claim 4 wherein the decoding includes discerning an apparent scaling of the scan data from an original scale of the encoding, and compensating therefor. However, Yamaguchi teaches that his system takes into consideration the pixels color difference to encode analog data into digital data. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would compensate for an apparent scaling of the scan data to read the different shades

in the pixels and decode the embedded data. This feature would help decode the invisible data from the image more precisely.

Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (U.S. 6,438,251) in view of Merriman et al (U.S. 5,948,061).

As per claim 2, Yamaguchi teaches:

A method of determining consumer response to print advertising, comprising:

steganographically encoding a first print advertisement with first plural-bit data; steganographically encoding a second print advertisement with second plural-bit decoding the first and second data when consumers present the first and second advertisements to a visible light optical sensor (see column 1, lines 60-67 – column 2, lines 1-37; column 12, lines 30-67); and

Yamaguchi fails to teach, tallying the number of decoded first and second data, respectively, to determine consumer response to the advertisements. However, Merriman et al teach a system that tracks how often a given advertisement has been displayed, how often a given user has seen a given advertisement and other information regarding the user and the frequency of the display of the advertisement (see column 2, lines 5-45). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Yamaguchi would embed in a state of invisibility data related to a product or service promoted by the printed promotional material, and would use the Merriman system to track how often a given user has seen a given advertisement and other information regarding the user and the frequency of the

display of the advertisement. This feature would help better target advertisements to customers.

As per claim 11, Yamaguchi does not expressly teach, the method of claim 2 wherein the first and second advertisements are substantially identical, except for different plural-bit data encoded therein. However, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that in Yamaguchi identical advertisements would have different encoded data as the advertisement and the encoded data are independent from each other (see column 12). The embedded or encoded data is invisible to the naked eye therefore identical images could have different encoded data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 703-306-5933. The examiner can normally be reached on 7:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 703-305-8469. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

D.L.

Daniel Lastra
December 2, 2002

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